

APPARATUS FOR CROSSTALK COMPENSATION IN  
A TELECOMMUNICATIONS CONNECTOR  
BRIAN CELELLA ET AL  
Attorney Docket No. SIE-0157  
Cantor Colburn LLP, 55 Griffin Road South, Bloomfield, CT 06002

Case #	Pair combination	Limit	NEXT loss magnitude limit <sup>1),4),5)</sup>	NEXT loss phase limit <sup>2),3)</sup>
Case 1	3,6-4,5	Low	$\leq 36.4 - 20\log(f/100)$	$(-90 + 1.5 \cdot f/100) \pm f/100$
Case 2	3,6-4,5	Central	$(37.0 \pm 0.2) - 20\log(f/100)$	$(-90 + 1.5 \cdot f/100) \pm f/100$
Case 3	3,6-4,5	High	$\geq 37.6 - 20\log(f/100)$	$(-90 + 1.5 \cdot f/100) \pm f/100$
Case 4	1,2-3,6	Low	$\leq 46.5 - 20\log(f/100)$	$(-90 + 1.5 \cdot f/100) \pm 3f/100$
Case 5	1,2-3,6	High	$\geq 49.5 - 20\log(f/100)$	$(-90 + 1.5 \cdot f/100) \pm 3f/100$
Case 6	3,6-7,8	Low	$\leq 46.5 - 20\log(f/100)$	$(-90 + 1.5 \cdot f/100) \pm 3f/100$
Case 7	3,6-7,8	High	$\geq 49.5 - 20\log(f/100)$	$(-90 + 1.5 \cdot f/100) \pm 3f/100$
Case 8	1,2-4,5	Low	$\leq 57 - 20\log(f/100)$	$90 \pm (30 \cdot f/100)$
Case 9	1,2-4,5	High	$\geq 70 - 20\log(f/100)$	any phase
Case 10	4,5-7,8	Low	$\leq 57 - 20\log(f/100)$	$90 \pm (30 \cdot f/100)$
Case 11	4,5-7,8	High	$\geq 70 - 20\log(f/100)$	any phase
Case 12	1,2-7,8	Low	$\leq 60 - 20\log(f/100)$	any phase

- 1) Magnitude limits apply over the frequency range from 10 MHz to 250 MHz.
- 2) Phase limits apply over the frequency range from 50 MHz to 250 MHz.
- 3) When the measured plug NEXT loss is greater than 70 dB, the phase limit does not apply.
- 4) When a low limit NEXT loss calculation results in values greater than 70 dB, there shall be no low limit for NEXT loss.
- 5) When a high limit NEXT loss calculation results in values greater than 70 dB, the high limit NEXT shall revert to a limit of 70 dB.

FIG. 1

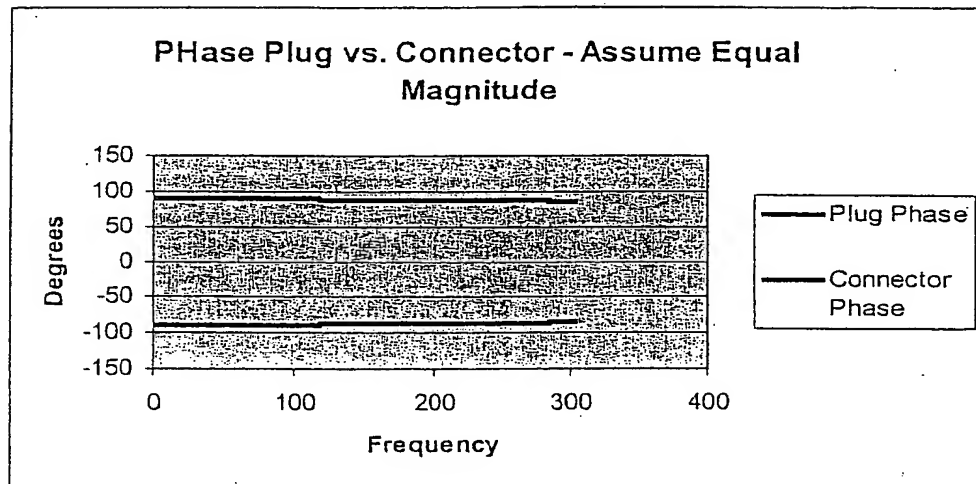


FIG. 2

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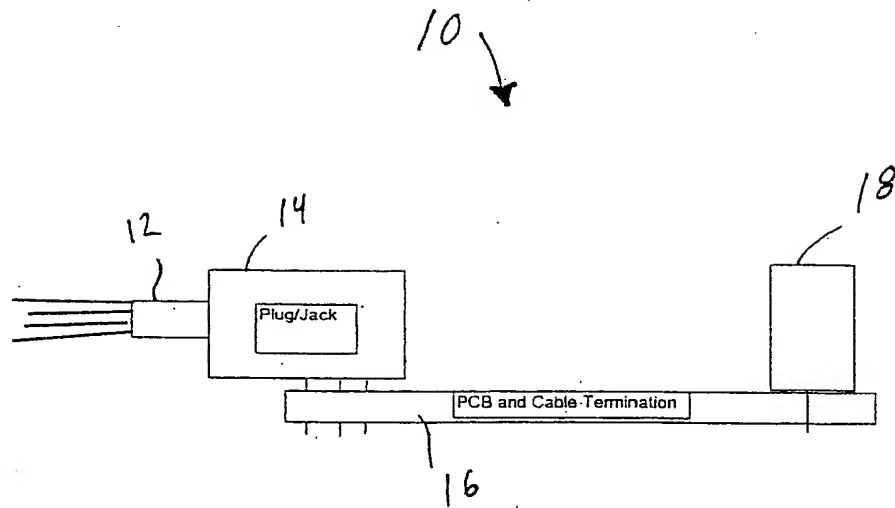


FIG. 3

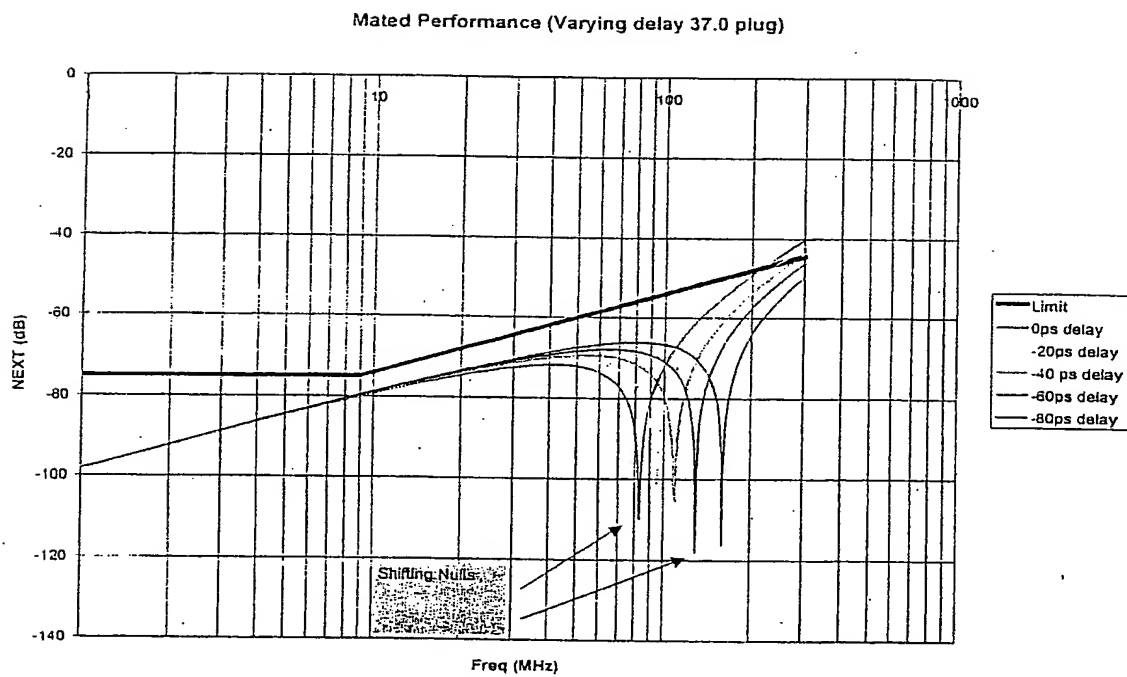


FIG. 4

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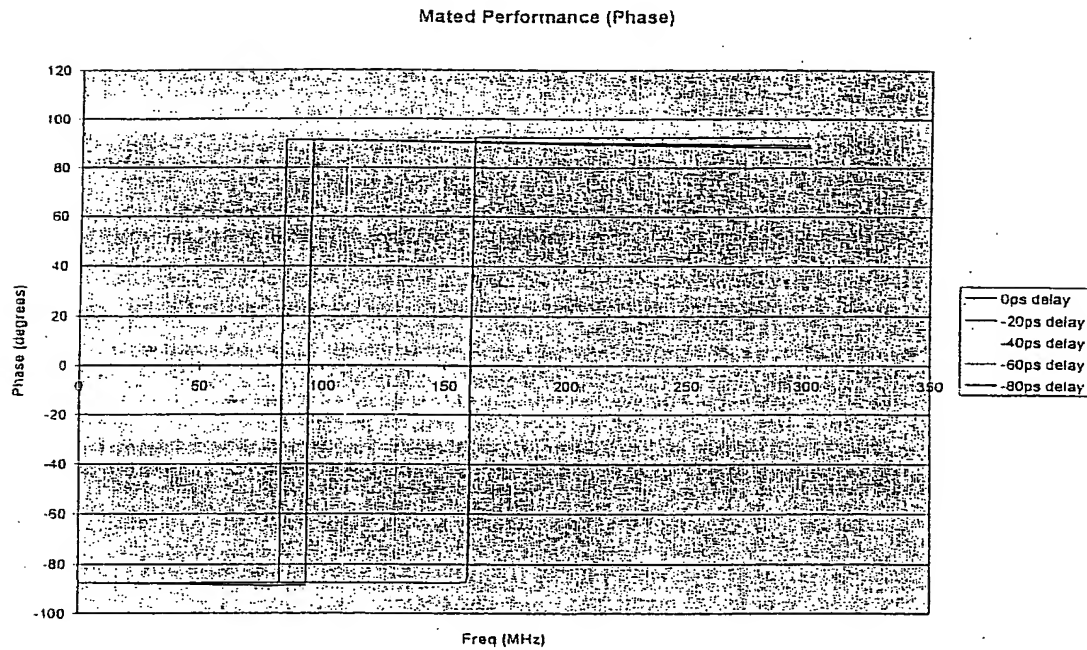
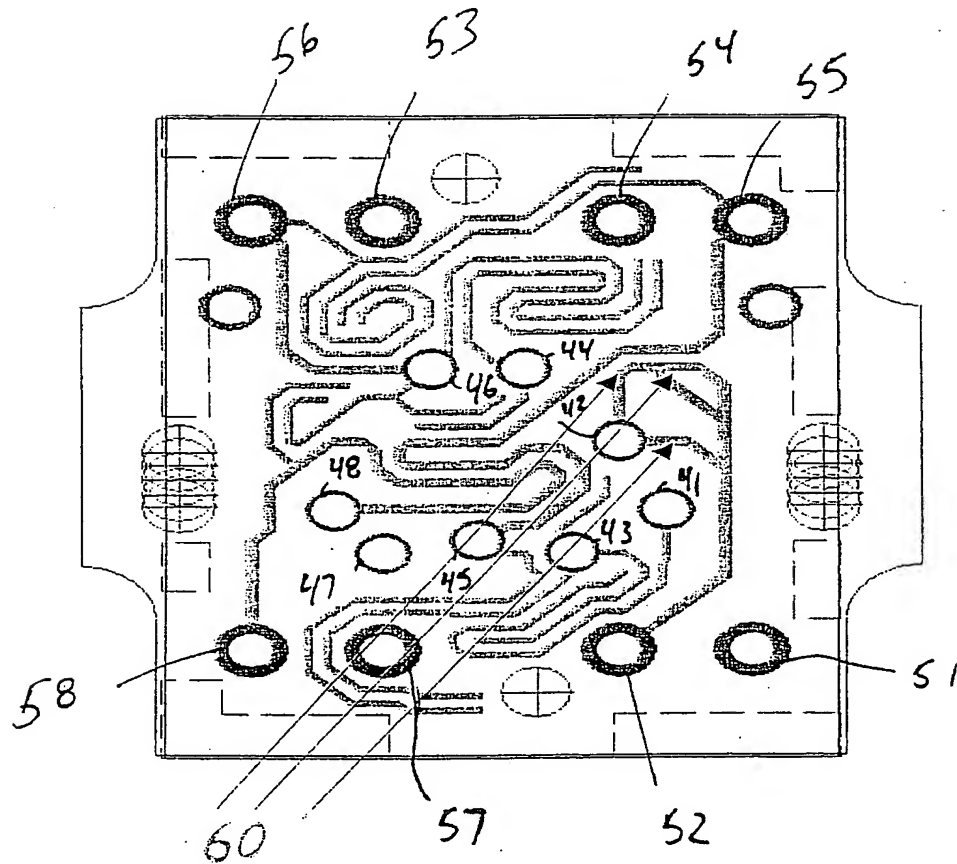


FIG. 5

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FIG. 6

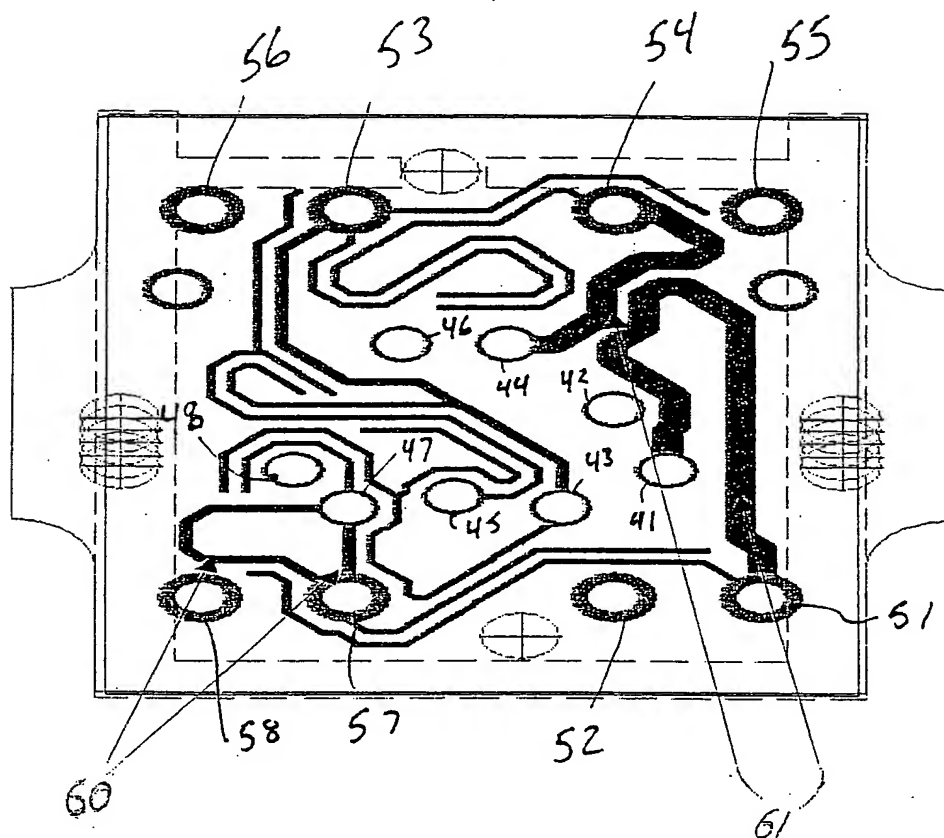


FIG. 7

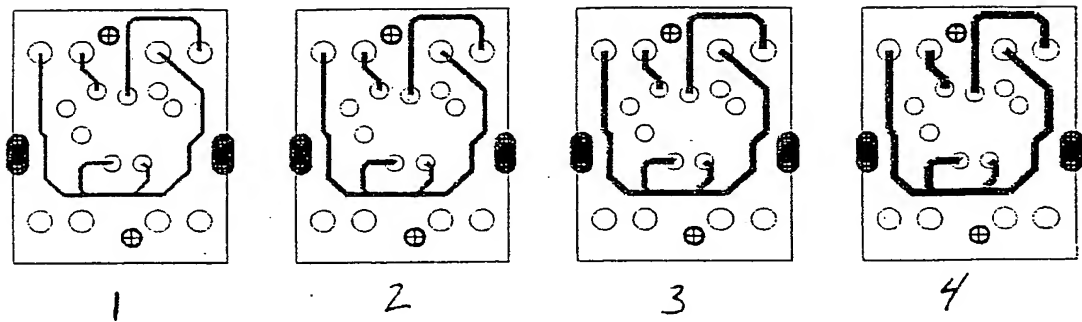


FIG. 8



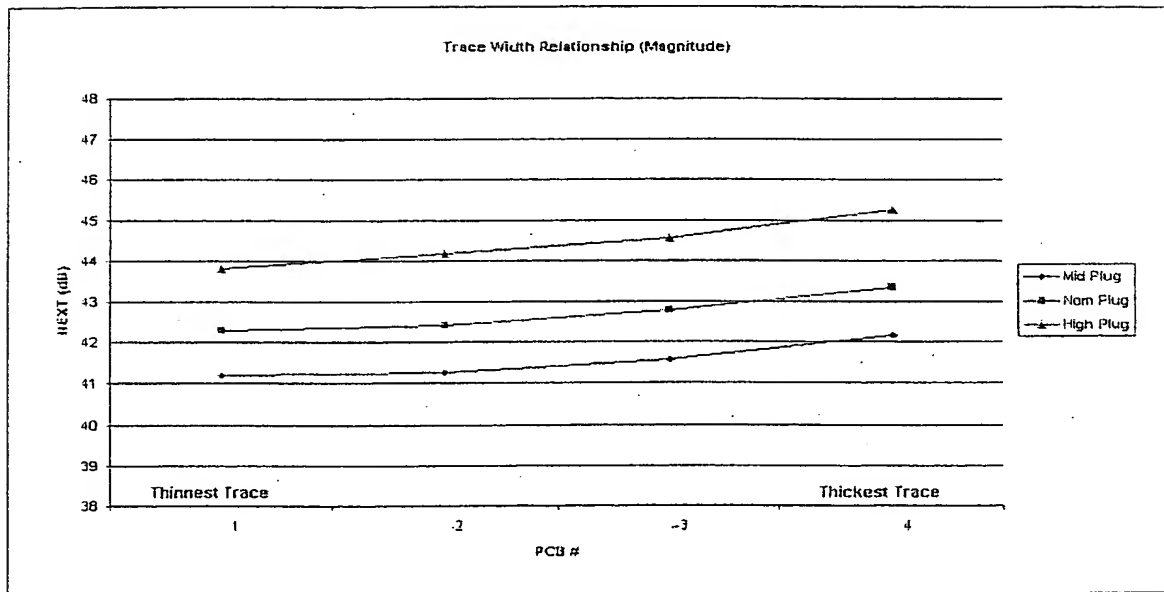


FIG. 9

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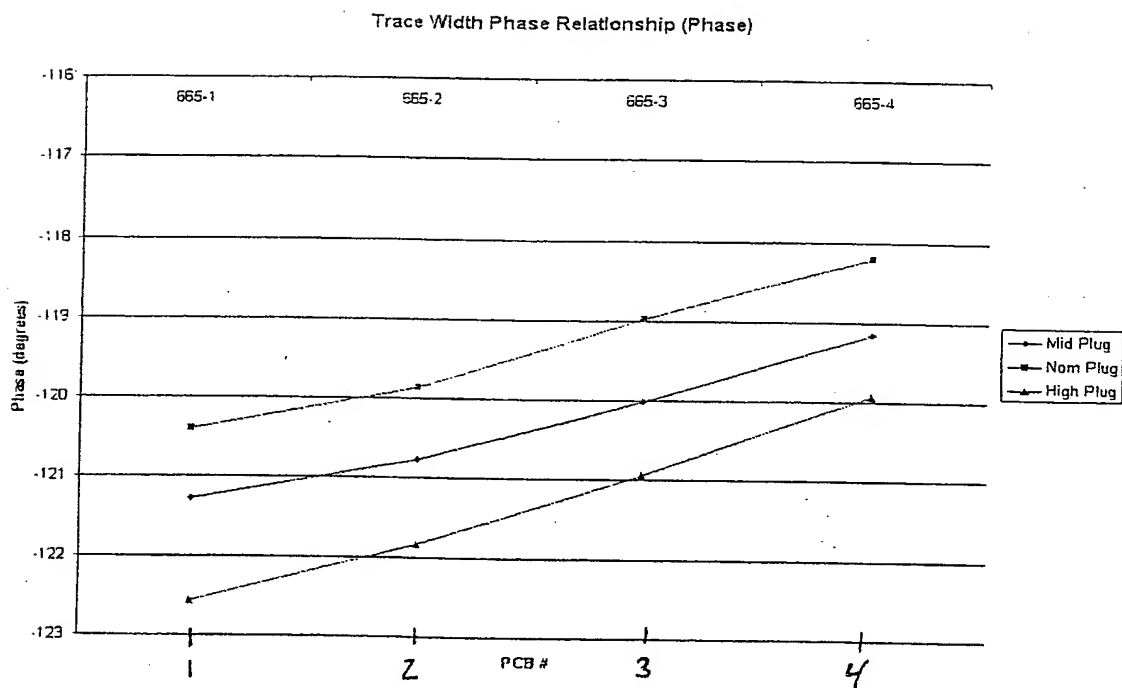


FIG. 10

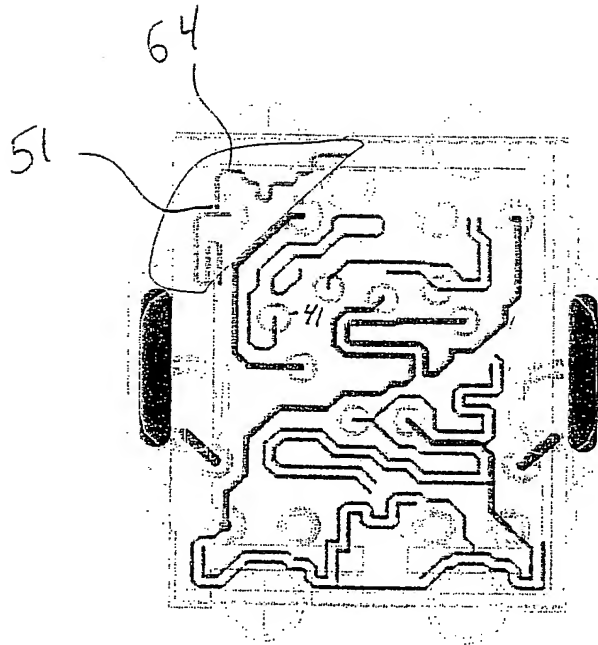


FIG. 11

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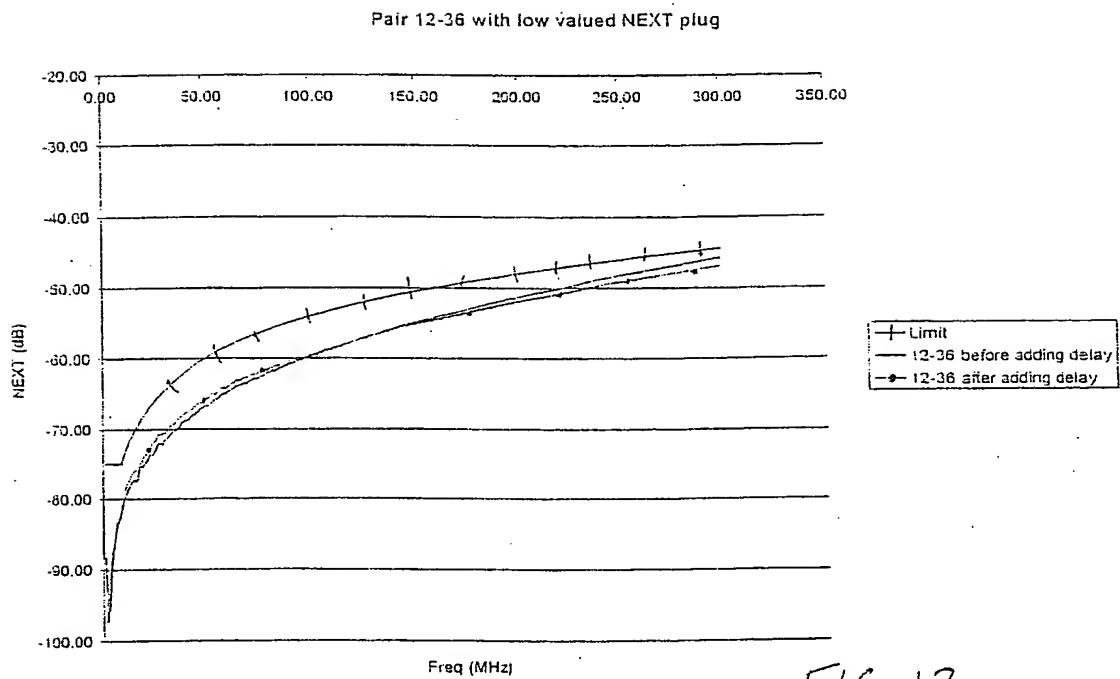


FIG. 12

